STS-113 POST LAUNCH PAD DEBRIS INSPECTION REPORT
KSC Debris Team
23 November 2002

The post launch inspection of the MLP-2, Pad A FSS, north flame trench, and Pad A apron was conducted on 23 November 2002 from Launch + 1.50 to 3.50 hours (2120 to 2330 EST).

No flight hardware was found.

Orbiter liftoff lateral acceleration data to predict stud hang-ups was not received from Boeing-Huntington Beach as a data stream loss had occurred. Inspection was performed and the south holddown studs were visually assessed as having no indication of hang-up. Erosion was typical for both the north and south posts. North holddown post blast covers and T-0 umbilical exhibited nominal exhaust plume damage. Both SRB aft skirt GN2 purge lines were intact and erect, protective tape layering was partially eroded and exhibited frayed braiding on the RH side.

The LO2 and LH2 Tail Service Masts (TSM) appeared undamaged with both bonnets observed to have closed properly. The MLP deck was generally in good shape.

The GH2 vent line latched on the seventh tooth on the latching mechanism. The vent line was located in a 'centered' position in the latching mechanism. The GUCP 7-inch quick disconnect probe was accessible for inspection and appeared to be undamaged with sealing surface in good shape. The deceleration cable was in nominal configuration, and the vent line blanket was sooted. A slight twist was observed in the restraining collar fixture adjacent to the ground carrier plate.

The OAA appeared to be intact with no evidence of plume impingement. All slidewire baskets were secured with no evidence of damage.

The GOX vent arm, ducts and structure appeared to be in nominal condition. The GOX vent seals were inspected and found to be in good shape with a small (3/8 inch w by ¼ h) indication of ET paint residue present on the +Y seal lower center position.

Debris findings included:

- Bolt (3/16 x 1-1/8 inch) with nut attached found adjacent to the LH water pipe between HDP 6 and 8.
- OTV camera 55 was found to be in the full-up position, indicating a pan & tilt mechanism failure.
- Pad apron, SRB plug material was found.
- North flame trench deflector, nominal erosion from left and right boosters.

Overall damage to the pad appeared to be nominal. Photos will be available on SIMS.

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